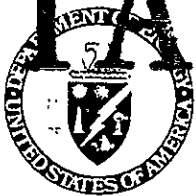


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Department of Energy

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Richland Operations Office
P.O. Box 550
Richland, Washington 99352

90-PPB-244

NOV 28 1990

Mr. Charles E. Findley, Director
Hazardous Waste Division
U.S. Environmental Protection Agency
1200 Sixth Avenue
Seattle, Washington 98101

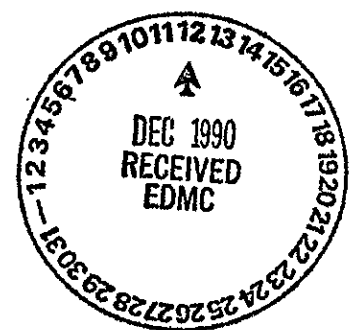
Mr. Timothy L. Nord
Project Manager
State of Washington
Department of Ecology
99 South Sound
Lacey, Washington 98503



Dear Messrs. Findley and Nord:

616 NONRADIOACTIVE DANGEROUS WASTE STORAGE FACILITY DANGEROUS WASTE PERMIT
APPLICATION (TSD: S-6-1)

This letter transmits a Notice of Deficiency (NOD) response table and associated revised text for the 616 Nonradioactive Dangerous Waste Storage Facility (NRDWSF) Part B Permit Application (Revision 1) for your review. This information is being transmitted in response to a letter received from the State of Washington Department of Ecology on August 30, 1990, and to discussions held at a October 23, 1990, unit managers meeting. A verbal agreement was reached with Ecology at this unit managers meeting that a NOD response table addressing unresolved comments and the associated draft text would be provided to Ecology for review at the next unit managers meeting scheduled for November 29, 1990.



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Messrs. Findley and Nord

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90-PPB-284

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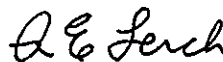
If you have any questions regarding the enclosed NOD response table or associated revised text, please contact Mr. C. E. Clark of the U.S. Department of Energy, Richland Operations Office on (509) 376-9333, or Ms. C. J. Geier of the Westinghouse Hanford Company on (509) 376-2237.

Sincerely,



R. D. Izatt, Director
Environmental Restoration Division
Richland Operations Office

ERD:CEC



R. E. Lerch, Manager
Environmental Division
Westinghouse Hanford Company

Enclosures:

1. NOD Response Table
2. Proposed Text Revisions

cc w/encls.:

P. J. Day, EPA
R. E. Lerch, WHC

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THE 616 NONRADIOACTIVE DANGEROUS WASTE
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9. Page 2-10, Section 2.1.2.6. The text states that the personnel will monitor the pH prior to discharging the contents of the trench without giving any justification for monitoring only pH.

Ecology Requirement: A pH only monitoring program for liquids in this trench prior to discharge is unacceptable. Due to the diverse nature of material handled in this facility and the consequences of a discharge to the french drain, a more detailed monitoring program is required. Please modify this section accordingly.

DOE-RL/WHC Response No. 1: As stated in Section 2.1.2.6, the trench is kept covered when the pad is not in use. Liquid is released from the trench based on pH alone, only after (1) it is known that no waste material has been introduced into the trenches, and (2) the liquid is from a rainfall or snowmelt.

The only way rain and snow water can become regulated is if the trench or loading pad was contaminated. Based on prior knowledge of the pad, trench, and the source of liquid, there is no requirement to sample the liquid in the trench. The pH of the liquid is taken to ensure that Westinghouse Hanford design standards are not exceeded (pH < 4, or >10). Use of a more comprehensive testing program for rainwater collected in the loading pad trenches currently is being evaluated.

Ecology Response: In order to confirm that the trench liquids do not contain other contaminants, use of additional real-time screening methods is required prior to release of any liquids to the french drain. Revise this and all other affected sections, at a minimum, the analytical parameters and procedures for testing trench liquids must be covered.

DOE-RL/WHC Response No. 2: A description of the process involved in verifying that the rainwater is clean before discharge is included in the permit application. This process includes documented inspections of the loading pad and documented analytical verification of spill cleanup efforts. Before discharge of the rainwater, all documentation is reviewed to verify that the pad is clean and a certification statement is entered into the 616 NRWSF logbook.

Page 2-12, line 31. Steps (1) and (2) of the verification process for draining the loading dock trenches are vague.

Ecology Requirement: In step (1), describe how the liquid is inspected for potential contamination. For example, if the examination consists of a visual inspection for obvious signs of contamination, state that. Note that a visual inspection is warranted and is adequate within the scope of the other verification steps. In step (2), "other related"

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9.	<p>(Cont'd)</p> <p>documents are reviewed to identify spills but these documents are not specified. All of the documents that may have records of spills, which would be reviewed prior to releasing the material to the drain field must be clearly stated.</p> <p>DOE-RL/WHC Response No. 3: A description of how the liquid is inspected will be included in the permit application. The actual documents reviewed will be identified in the permit application.</p>	
10.	<p>Page 2-10, Section 2.2. The topographic map outlines the legal boundaries of the facility yet no legal description is given.</p> <p><u>Ecology Requirement:</u> Please provide a legal description of this facility.</p> <p>DOE-RL/WHC Response No. 1: A legal description of the 616 NRDWSF site will be provided.</p> <p>Page 2-8, line 40. The permit application states that a legal description of the 616 NRDWSF is provided in Plate 2-3, yet this item is not yet provided.</p> <p><u>Ecology Requirement:</u> Provide the illustration as soon as possible; it will be evaluated upon receipt.</p> <p>DOE-RL/WHC Response No. 2 The legal description will be provided as soon as possible.</p>	
14.	<p>Page 3-1, Section 3.1. The text states that the generating units are responsible for designating the wastes they produce. This is true, however, this does not alleviate the receiving facility (i.e., 616 NRDWSF) from verifying wastes accepted.</p> <p><u>Ecology Requirement:</u> Please modify this section to address the 616 facility's responsibility for waste verification. This must include modifying Section 3.0 to include a waste sampling program for verifying loads received at the facility.</p> <p>DOE-RL/WHC Response No. 1: Washington Administrative Code 173-303-300(3), <i>General Waste Analysis</i>, requires that "...The owner or operator of an offsite facility shall confirm, by analysis..." Because the 616 NRDWSF accepts only DOE-RL waste generated onsite (from facilities under the same ID number), the 616 NRDWSF is not an offsite facility. Therefore, verification of the waste accepted at the 616 NRDWSF is not required.</p>	
	<p><u>Ecology Response:</u> The intent of this regulation is to ensure that there is verification of the generator designation. Because the facilities at the Hanford Site are operated as separate facilities, Ecology is requiring institution of a verification sampling program for all wastes received at the NRDWSF. As discussed at the Unit Manager's meeting of 1/23/90,</p>	

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14. (Cont'd)

this sampling may be done at the 616 NRWWSF or at the generator site provided that there is no further possibility for the generator to alter the waste constituents. Modification of the procedure discussed in comment number 28 may be sufficient to fulfill this requirement. DOE-RL/WHC Response No. 2: A description of the process used to perform the initial designation of waste and subsequent control of the waste from the time of designation through offsite shipment is included in the permit application. This process includes a description of the method for initial designation of the waste, control of the waste from designation through shipment offsite, and the oversight performed of this process.

Page 3-1, line 23. The revised text on page 3-1, lines 23-38, and references therein, is intended to demonstrate the adequacy of the waste designation procedure in use at the Hanford Facility. Although the procedure discussed indicates that there are numerous controls to prevent tampering with containerized wastes, the actual steps for the waste designation appear to have insufficient quality assurance or quality control. It has not been demonstrated that the Hanford Facility waste designation procedures are adequate for the purpose and intent of WAC 173-303-110.

Furthermore, dependence on offsite treatment, storage, and/or disposal (TSD) facilities for testing of wastes is not adequate because the Hanford Facility has no control over the receiving facility's quality assurance and quality control procedures.

Ecology Requirement: Institution of a waste designation sampling and analysis verification program is required. This program must comply with the requirements of Section II.E., *Site Wide Waste Analysis Plan*, of the Hanford Facility Part B Permit. This requirement may be fulfilled by restricting acceptance of wastes at the 616 NRWWSF to those designated in accordance with the waste analysis plan of the Hanford Facility Permit.

DOE-RL/WHC Response No. 3: This issue is being resolved as part of the Hanford Facility Part B Permit.

19. Page 3-6, Section 3-2, 1st Paragraph. The text discusses the responsibilities of the TSD technical staff. Is this staff from the 616 NRWWSF or from another group at the Hanford Site?

Ecology Requirement: Please clarify 'staff.'

DOE-RL/WHC Response No. 1: The TSD technical staff (assigned to the 616 NRWWSF) provides waste designation guidance to various site generators (see response to comment number 18). The text will be modified to clarify 'staff.'

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19.	<p>(Cont'd)</p> <p>DOE-RL/WHC Modified Response: The TSD technical staff has been more specifically identified as the Solid Waste Engineering staff. The text has been modified to indicate that the Solid Waste Engineering staff performs an oversight function, independent from the generating units.</p> <p>Page 3-4. The organizational responsibilities of the 'staff' still are not clear. For example, the generating unit's waste coordinator is overseen by Solid Waste Engineering, but it is not stated if the waste coordinator is part of the generating unit's personnel or Solid Waste Engineering's personnel.</p> <p><u>Ecology Requirement:</u> Clarify the organization and responsibilities of the various Hanford Facility staff involved in the handling of dangerous waste from generation through transport to TSD. Include an organization chart indicating which staff at the 616 NRDSWF are responsible to which organizations.</p> <p>DOE-RL/WHC Response No. 2: The text has been modified to clarify organizational responsibilities.</p>	
31.	<p>Page 4-4, Section 4.1.1.4. This paragraph outlines the use of 'Aquapon' as a concrete sealant and refers the reader to Appendix 4C for further details. Appendix 4C only has the Material Safety Data Sheet for this product and no performance evaluations.</p> <p><u>Ecology Requirement:</u> Please provide further documentation on this product. Of particular importance will be information which details the performance of this material when exposed to the various waste types located in the 616 NRDSWF.</p> <p>DOE-RL/WHC Response No. 1: Performance evaluations are provided in Appendix 4D.</p> <p>Page 4D-9, Appendix 4D: An abbreviated table of the performance data for the concrete sealant, Aquapon, is given. No information is presented on the performance in the presence of non-oxidizing acids. It is not clear if the salts ($\text{Fe}(\text{NO}_3)_3$, NaHCO_3, etc.) are in aqueous solution or if they are crystalline. There are some errors in the chemical names and abbreviations; NaHCO_3 is sodium bicarbonate of sodium hydrogen carbonate, $\text{Ca}(\text{OCl})_2$ is calcium hypochlorite, and BUOH should be BuOH.</p>	

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31.	<p>(Cont'd)</p> <p><u>Ecology Requirement:</u> Clarify the test conditions (temperature, physical state of test materials). Evaluate if it is appropriate to use an additional sealant in cells where wastes that affect Aquapon are stored. Correct the chemical nomenclature errors.</p> <p>DOE-RL/WHC Response No. 2: The text has been modified to clarify the adequacy of the concrete sealant. The table found in Appendix 4D has been modified to better reflect the recommended uses of the Aquapon sealer based on information provided by the manufacturer.</p>	
32.	<p><u>Page 4-4, Section 4.1.1.4.</u> The text describes cement crack repair yet there are no details of this procedure.</p> <p><u>Ecology Requirement:</u> Please provide a procedure for cement crack repair.</p> <p>DOE-RL/WHC Response No. 1: A description of the procedure for crack repair has been provided.</p> <p><u>Page 4-3, line 32.</u> The text has been revised to state that cement crack repair and sealant application will be performed per the manufacturer's instructions.</p> <p><u>Ecology Requirement:</u> State the performance specifications and time frames within which these repairs will take place. Describe how operations at the 616 NRDFS may be affected by these repairs. State what records of these repairs will be kept and how the repair will be certified as adequate.</p> <p>DOE-RL/WHC Response No. 2: The text has been modified to provide a better description of the cement crack repair procedure.</p>	
38.	<p><u>Page 6-5, Section 6.3.1.3.</u> This section outlines the types of available emergency equipment but not the exact inventory.</p> <p><u>Ecology Requirement:</u> Please provide the inventory and locations of all emergency equipment.</p> <p>DOE-RL/WHC Response No. 1: A reference to Chapter 7.0, Section 7.5.3 will be made.</p> <p><u>Ecology Response:</u> The information given in Chapter 7.0 does not give a comprehensive inventory of available emergency equipment nor does it give the storage locations. This reference will not provide the information requested. Provide the inventory and locations of all emergency equipment as required under WAC 173-303-806(4)(a)(vii).</p>	

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38.	<p>(Cont'd)</p> <p>DOE-RL/WHC Response No. 2: The list of equipment is included in the actual 616 NRDFS emergency plan included as Appendix 7A. The text has been modified to include a reference to Appendix 7A.</p> <p><u>Appendix 7A:</u> The 616 NRDFS permit application has a table of emergency equipment giving the item, location, and capability. This table is very poorly reproduced and is almost illegible. Additionally, the items listed do not appear to be adequate for protection of personnel in an emergency response. For example, the respiratory protection equipment consists of dust masks and some, "equipment for radioactive airborne contamination." The amounts and sizes of emergency equipment is not given. This table does not fulfill the requirements of WAC 173-303-806(4)(a)(vii).</p> <p><u>Ecology Requirement:</u> Replace this table with a legible table that duplicates the information on this table and also states the exact inventories in terms of numbers, sizes, locations, and descriptions of the safety equipment. For example, each item in the 'Emergency Monitoring Kit' should be listed separately. Evaluate and revise this list as necessary so that personnel responding to an emergency situation will be adequately protected.</p> <p>DOE-RL/WHC Response No. 3: A legible copy of Table 1, Identification and Description of Emergency Equipment, will be included. Table 1 identifies emergency equipment in the 616 NRDFS. The reference to the 'Emergency Monitoring Kit' has been deleted because it is not in the 616 NRDFS and is not applicable for any expected emergency response at the 616 NRDFS. The minimum quantities of protective equipment maintained in the 616 NRDFS have been added to Table 1. Responses requiring additional respiratory protection would be handled by the appropriate site emergency response personnel as indicated in Section 6.5.1 of the Building Emergency Plan. This information fulfills the requirements of WAC 173-303-806(4)(a)(ii) to comply with WAC 173-303-350.</p>	
44.	<p><u>Page 7-3, Section 7.2.1, 2nd Paragraph.</u> The text states that the building emergency director is not on call 24 hours/day. The person who is on call must be familiar with the facilities and emergency procedures for this building.</p> <p><u>Ecology Requirement:</u> Please clarify the text to appropriately explain this.</p> <p>DOE-RL/WHC Response No. 1: Those persons authorized to act for the building emergency</p>	

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44.	<p>(Cont'd)</p> <p>director during his absences are provided with sufficient information, training, and authority to allocate resources to respond to any emergency situation at the 616 NRDWSF. The Fire Department Battalion Commander and the Emergency Duty Officer have the names and phone numbers of the primary and alternate Building Emergency Director. The text will be modified to indicate that all persons authorized to act for the building emergency director have the authority to commit all resources necessary for resolving an emergency situation at the 616 NRDWSF.</p> <p>DOE-RL/WHC Modified Response: The actual 616 NRDWSF emergency plan is included as Appendix 7A. The emergency plan identifies the individuals authorized to act for the Building Emergency Director.</p> <p><u>Appendix 7A:</u> The contingency plan does not require that the alternate building emergency director be familiar with the building.</p> <p><u>Ecology Requirement:</u> This is required, revise the text and operations accordingly.</p> <p>DOE-RL/WHC Response No. 2: The contingency plan does require that the building emergency director be familiar with all operations and activities in the 616 NRDWSF (building emergency plan, page 44). This applies to the listed alternates as well as the primary building emergency director. As indicated in the 616 Building Emergency Plan, Section B.5.1, the primary and alternate building emergency directors are listed in the order they will assume responsibility. Any requirements of the building emergency director are applicable to any of the personnel listed.</p>	
46.	<p><u>Page 7-5, Section 7.2.2.1.</u> This section briefly explains the 'Building Emergency Organization' without identifying these key personnel.</p> <p><u>Ecology Requirement:</u> Please identify these persons.</p> <p>DOE-RL/WHC Response No. 1: See response to comment number 43.</p> <p><u>Appendix 7A:</u> Ecology requested that the key personnel mentioned in the Building Emergency Organization be identified. Comment number 43 is referenced yet it does not fulfill the requirement that key personnel be identified.</p> <p><u>Ecology Requirement:</u> While Ecology is not requiring the exact identity of personnel, as a minimum, the job title and classification for key personnel in the Building Emergency Organization must be provided within the 616 NRDWSF permit application.</p>	

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46.	<p>(Cont'd)</p> <p>DOE-RL/WHC Response No. 2: The 616 Building Emergency Plan at the waste management unit and at the emergency response organizations lists the names and phone numbers of the building emergency organization personnel. Job titles can be supplied for the actual personnel although this is only necessary for the building emergency directors. It should be noted that the primary building emergency director is the Solid Waste Operations supervisor for the 616 NRDWSF and the alternates are Solid Waste Operations supervisors responsible for the waste management unit in his absence.</p>	
56.	<p><u>Page 11-2, Section 11.1.1.1, 2nd Paragraph.</u> The text states that background will be taken by coring the walkway. This is not adequate. Background will need to be at a point outside the potential area of impact. This would ideally be at a point outside of any of the operative (100, 200, etc.) areas.</p>	
	<p><u>Ecology Requirement:</u> Please rewrite this section to include a more appropriate background sampling point. This comment applies to all discussions on background sampling in this application.</p> <p>DOE-RL/WHC Response No. 1: Background ideally is located in uncontaminated material identical to the potentially contaminated material being assessed for concrete. A background sample must be taken in the same pour as the sample to be assessed for contamination (same aggregate and concrete). The appropriate location for such sampling is the walkway in the 616 NRDWSF, because:</p> <ul style="list-style-type: none">(1) No waste handling operations ever occurred there(2) The walkway is sealed(3) The top portion of the concrete will be removed before analysis. Variability of concrete, due to different sources of cement and aggregate, requires selection of background in the same pour as the concrete being assessed for contamination. In the case of the 616 NRDWSF, no other appropriate background sampling location besides the walkway are considered appropriate.	
	<p><u>Ecology Response:</u> This will be sufficient, however, it will also be necessary to provide a comparison for the onsite background sample to determine that any contamination is not due to a facility-wide contamination.</p> <p>DOE-RL/WHC Response No. 2: The text has been revised to indicate that background threshold concentrations and significance levels will be based on information including mean concentrations and variance for each constituent of concern. Specific approaches and the criteria and assumptions implicit in establishing concentration levels that constitute</p>	

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56.	<p>(Cont'd)</p> <p>significant deviation from background or other control levels will be consistent with the outcome of background discussions currently underway with Ecology and the EPA.</p> <p>Page 11-2, line 39. The text states "... background samples will be compared to suitable samples to verify comparability of the data." It is not clear what this statement means. The intent of the original requirement was to ensure that the background samples taken at the 616 NRDSF are not subject to contamination present throughout this TSD unit.</p> <p><u>Ecology Requirement:</u> Revise the text so there is verification that the background samples taken at the 616 NRDSF are not subject to contamination present throughout this TSD unit.</p> <p>DOE-RL/WHC Response No. 3: The text has been revised to clarify the establishment of background levels for the 616 NRDSF.</p>	
57.	<p>Page 11-8, Section 11.1.4.3. The text describes the process for decontaminating the walls of the facility. There is, however, no discussion of verification sampling.</p> <p><u>Ecology Requirement:</u> Please revise this section to include verification sampling. This comment is also applicable to the discussion in Section 11.1.4.3.1 (Sampling and Decontamination of Concrete Floor).</p> <p>DOE-RL/WHC Response No. 1: Verification sampling has been incorporated into the text.</p> <p>Page 11-8, line 11. The text has been revised to indicate that the rinsate from decontaminating the walls will be designated. Designating the rinsate will not show that the walls are free of contamination, as was the intent of this requirement.</p> <p><u>Ecology Requirement:</u> Revise the permit application to reflect that the walls will be subject to verification sampling and analysis after decontamination. See page 11-2, lines 26 through 28.</p> <p>DOE-RL/WHC Response No. 2: The text has been revised to incorporate verification sampling and analysis after decontamination.</p>	
66.	<p>Page 12-4, Table 12-1. The table erroneously shows that the Closure Cost estimates are not required. Please refer to comment number 65.</p> <p><u>Ecology Requirement:</u> Please modify the table accordingly.</p> <p>DOE-RL/WHC Response No. 1: The WAC 173-303-620(1)(c) exempts federal facilities from the requirements of closure cost estimates as stated in WAC 173-303-620(3)(a).</p>	

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66.	<p>(Cont'd)</p> <p><u>Ecology Response:</u> Federal facilities are exempt from this requirement as cited above, however, under WAC 173-303-620(1)(c), "...operators of facilities who are under contract with the...federal government must meet the requirements of this section." On page iii of this permit application it states, "Westinghouse Hanford Company...serves as co-operator of the 616 Nonradioactive Dangerous Waste Storage Facility..." Therefore, the closure cost estimates required under WAC 173-303-620 must be provided.</p> <p>DOE-RL/WHC Response No. 2: It is the view of DOE-RL/WHC that the financial requirements of WAC 173-303-620 do not apply to Westinghouse Hanford. Insofar as the legal operating status of the waste management unit includes both the DOE-RL and Westinghouse Hanford (as co-operator), and does not expressly recognize Westinghouse Hanford as the sole operator of any RCRA waste management unit, the government exemption applies. This view is consistent with 40 CFR 264.140 (c), which exempts states and the federal government from the financial requirements of 40 CFR 264, Subpart H. The text will remain unmodified.</p> <p><u>General Comment:</u> It is stated that because Westinghouse Hanford Company is a co-operator, requirements for closure cost estimates do not need to be met. The apparent difference between an operator and a co-operator is one of semantics.</p>	
	<p><u>Ecology Requirement:</u> Closure cost estimates must be provided.</p> <p>DOE-RL/WHC Response No. 3: The DOE-RL/WHC response remains the same as Response No. 2 above.</p>	
73.	<p><u>Page 3-5, Section 3.2.</u> In the Waste Disposal Analysis it states that a review of the waste will be performed from information supplied by the generator. "<u>If</u> the information provided is correct and adequate, the TSD technical staff performs the following..." emphasis added.</p> <p><u>Ecology Requirement:</u> Describe this review. Is there any analytical verification of generator information? State what steps will be taken if the information provided is not correct or adequate.</p> <p>DOE-RL/WHC Response No. 1: The text has been modified to indicate that no analytical verification of generator information is performed (also see response to comment number 14). The text has been modified to include the steps that are taken when inadequate information is provided by the generator.</p> <p><u>General Comment:</u> Verification of waste designation is addressed.</p>	
	<p><u>Ecology Requirement:</u> Refer to comment number 14 for requirement.</p> <p>DOE-RL/WHC Response No. 2: Refer to comment number 14 for response.</p>	

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74.	<p><u>Page 3-17, Table 3-6.</u> The first NOD (submitted 11/21/89) states that this table needs to be enlarged for clarity. Note also that there is no key provided for the first table; it is meaningless without it.</p> <p><u>Requirement:</u> Please enlarge these tables and provide keys for their interpretation. <u>DOE-RL/WHC Response:</u> The tables have been enlarged and appropriate keys provided.</p> <p><u>Page APP F3-6.1.</u> The table has no key.</p> <p><u>Ecology Requirement:</u> A key must be provided. <u>DOE-RL/WHC Response No. 2:</u> The table has been removed.</p>	
83.	<p><u>Page 6-6.</u> The safety shower located in the acid cell has no containment barrier to prevent mixing of the incompatible water and acids.</p> <p><u>Ecology Requirement:</u> This may be corrected in two ways, 1) construct a containment barrier which will prevent flow of water into areas where acid spills will also flow, or 2) move the shower to an area where uncontrolled water flow could not result in mixing with incompatible materials. <u>DOE-RL/WHC Response No. 1:</u> The acid and combustible storage cells have been switched to prevent the mixing of incompatible materials.</p> <p><u>Page 2-3, line 39.</u> Different hazard class categories have been assigned to the storage cells in order to avoid chemical incompatibility between the safety shower water and spilled waste acids. Although the original comment stated that it was inappropriate to store waste acids in the cell with this shower, it was not clearly stated that all chemical incompatibilities should be avoided. The permit application now states that combustibles are stored in the cell with the safety shower and furthermore, caustic waste may be stored here on an overflow basis. However, storage of caustic materials in this cell is also inappropriate because of their chemical incompatibility with water as well as some halogenated organic chemicals.</p> <p><u>Ecology Requirement:</u> Evaluate the compatibilities of the various wastes that are received in the 616 NRDWSF. Develop a table of hazard class compatibilities based on this evaluation that designates an alternate class cell(s) for overflow storage of dangerous waste containers. Include this table in the permit application. The text and operations must be modified so that the following requirements are met.</p>	

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83.	<p>(Cont'd)</p> <ul style="list-style-type: none">• Dangerous wastes of one hazard class must be stored in a cell of the same hazard class unless that storage cell's capacity is exceeded.• If a storage cell's capacity is exceeded and overflow storage is needed, then containers may be stored only in the cells of the hazard class(es) stipulated by the table.• If containers of more than one hazard class must be stored in the packaging and sampling room, then the container's contents must be of compatible hazard classes according to the table.• If the storage space available does not meet the above requirements, then the waste will not be accepted at the 616 NRDFS. <p>DOE-RL/WHC Response No. 2: A table of hazard class compatibilities has been included in the permit application. The text has been modified to provide guidelines for overflow storage of dangerous waste containers.</p>	
85.	<p><u>Page APP 2B-12, Section III.</u> Within the 'Sample Procedures' there are a number of conflicting and confusing requirements. The following quotes are an example of this:</p> <p>p 2B-4 "NOTE -- The hazardous Materials Response Team must be called if a ruptured container is identified."</p> <p>p 2B-12 "Supervision shall determine if the ... Hazardous Materials Response Team is needed."</p> <p>There are also numerous cases where the assignment of responsibility is ambiguous, the following are examples:</p> <p>p 2B-15 "Notify Industrial Safety and Fire Protection and Solid Waste Engineering if not already notified by the Hanford Fire Department or supervision.</p> <p>p 2B-15 It is not clear whether the building supervisor, the Fire Marshall, or someone else is in charge of the Hazardous Materials Response Team.</p>	
	<p><u>Ecology Requirement:</u> Rewrite and submit actual procedures or descriptions as required under WAC 173-303-806 for this facility that fulfill the following:</p>	

9 1 1 2 3 5 5 1 3 7 5

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85. (Cont'd)
- Different sections within the permit application must be consistent, in other words, different sections should not contain conflicting requirements.
 - The procedures must clearly state who is responsible for certain tasks. Performance of necessary actions must be the responsibility of one person, not a multitude.
 - A clear and comprehensible chain-of-command must be delineated for this facility. In no cases should responsibility be ambiguous.

Also refer to comment number 69.

DOE-RL/WHC Response No. 1: The actual 616 NRDWSF emergency plan is included as Appendix 7A. The emergency plan clearly identifies emergency response responsibilities. All other sample procedures have been removed from the permit application and replaced with descriptions of procedures as required by WAC 173-303-806.

Appendix 7A. The contingency plan must fulfill the following:

- The procedures must clearly state who is responsible for certain tasks. Performance of necessary actions must be the responsibility of one person, not a multitude
- A clear and comprehensible chain-of-command must be delineated for this facility. In no cases should responsibility be ambiguous
- All probable unit-specific events must be considered and specific remedial activities for each must be presented, including those for imminent hazards
- It must be a stand-alone document for unit-specific events.

Ecology Requirement: Amend the contingency plan so that the above requirements are met.

DOE-RL/WHC Response No. 2: The 616 Building Emergency Plan complies with the requirements for the contingency plan. Responses to each bullet in the comment are as follows:

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85. (Cont'd)

Item 1 -- "The procedures must clearly state who is responsible for certain tasks. Performance of necessary actions must be the responsibility of one person not a multitude."

As indicated in the 616 Building Emergency Plan, the building emergency director has primary responsibility for directing responses after notification of an emergency situation. The requirements of waste management unit personnel identifying the emergency condition are also provided for various potential emergencies. The required actions for each individual are specified but any emergency response may require actions by several people. There is no requirement in the WAC that one person perform all necessary actions.

Item 2 -- "A clear and comprehensible chain-of-command must be delineated for this facility. In no cases should the responsibility be ambiguous."

The 616 Building Emergency Plan clearly states that the building emergency director is responsible for implementation of emergency response actions. Site response organizations responsibilities are also identified. No cases of ambiguity are identified.

Item 3 -- "All probable unit-specific events must be considered and specific remedial activities for each must be presented, including those for imminent hazards."

All probable unit-specific events have been identified in the 616 Building Emergency Plan and necessary responses identified. This includes all identified potential hazards.

Item 4 -- "It must be a stand-alone document for unit specific events."

The 616 Building Emergency Plan is the emergency response document for the personnel in the 616 NRWWSF. As part of the Hanford Site, emergency response must be coordinated for all facilities onsite, which is done by Emergency Preparedness. All Westinghouse Hanford Site waste management unit specific emergency plans are prepared in compliance with WHC-CM-4-1, Emergency Plan. The Hanford Site plan identifies the actions required by response organizations. There is no requirement in WAC 173-303 that the contingency plan for each unit be a single document.

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86.	<p>Page APP 2B-14, Section V, Procedure. The permit application states, "[a]fter the leak is contained, supervision will consult Industrial Safety and Fire Protection and Solid Waste Engineering for use of proper protective equipment..." (emphasis added).</p> <p><u>Ecology Requirement:</u> State what decision process will be followed for determining the proper protective equipment <u>prior</u> to leak containment.</p> <p>DOE-RL/WHC Response No. 1: The actual 616 NRDWSF emergency plan is included as Appendix 7A.</p> <p>The emergency plan clearly identifies emergency response actions to be taken in the event of a spill.</p> <p><u>Appendix 7A.</u> The facility emergency response plan does not discuss protective equipment.</p> <p><u>Ecology Requirement:</u> This is required, amend the text accordingly.</p> <p>DOE-RL/WHC Response No. 2: The 616 Building Emergency Plan does list all emergency equipment in the waste management unit. It also identifies the location and provides a physical description (Table 1) as required in WAC 173-303-350(3)(e). There is no change required.</p>	
87.	<p>Page APP 2B-27, Section VI, Numbers 3-5. During a site visit (1/11/90) it was noted that the procedure for container labeling in use at the facility is not consistent with that described in the permit application nor is it in compliance with the applicable regulations.</p> <p><u>Ecology Requirement:</u> Container labeling must comply with the provisions of WAC 173-303-190 and WAC 173-303-630(3). Implement the requirements of these regulations immediately and modify the permit application accordingly.</p> <p>DOE-RL/WHC Response No. 1: The container labeling procedure was reviewed and determined to fully comply with the requirements of WAC 173-303-190 and WAC 173-303-630(3). The text will remain unmodified.</p> <p><u>Appendix 2B:</u> Container labeling is not described.</p> <p><u>Ecology Requirement:</u> Describe and illustrate how the container labeling requirements of WAC 173-303-190 and -630(3) are met.</p> <p>DOE-RL/WHC Response No. 2: The text has been modified to clearly describe the container labeling practices.</p>	

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** The following comments were received from Ecology on August 29, 1990, and are considered to be a supplement to the NOD received on November 21, 1989. **

90. Page vii. The lists of acronyms and abbreviations is not comprehensive. For example, it is not clear from these lists what is meant by 'facility.'

Ecology Requirement: This section must be sufficiently comprehensive to prevent ambiguities in the terms used within the permit application. This section should be expanded to include a list of definitions where, as a minimum, terms such as 'facility,' 'generator,' 'Hanford Site,' 'offsite,' 'onsite,' and 'unit,' are clearly defined. Refer to WAC 173-303-040, Definitions.

DOE-RL/WHC Response: A definitions section has been added to Chapter 1.0.

91. Page vii, line 46. Typographical error. Kilopascal should be one word with the 'p' in small typeface.

DOE-RL/WHC Response: The word kilo Pascal will be corrected to read kilopascal.

92. Page 1-4, line 31. A number of potential changes to the permit are proposed to be treated as minor modifications if they are necessary after the permit has been issued.

Ecology Requirement: Some of these proposed changes can be considered minor modifications but others will require submittal of more specific information prior to determining how these changes to the Part B permit may be done after issuance of the permit.

The following are changes that may be made to the permit, subject to approval by Ecology:

- Addition and/or deletion of dangerous waste codes for waste to be stored as a result of changing regulations
- Changes in the annual quantities of regulated waste to be handled
- Changes to the 616 NRDWSF unit and/or facility and associated changes to drawings
- Revision of forms included in the permit.

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92.	<p>(Cont'd)</p> <p>Documentation for the proposed change should be submitted to Ecology; if Ecology does not respond within 60 days from receipt of the proposal, the proposed modification will take effect as a minor modification.</p> <p>The following changes may be made to the permit as minor modifications in accordance with WAC 173-303-830(4):</p> <ul style="list-style-type: none">• Correction of typographical errors• Changes to the lists of facility emergency coordinators or equipment identified in the contingency plan• Inclusion of new and/or updated maps• Revision of the Radiation Exempt Facility List. <p>All other permit modifications shall be performed in compliance with the requirements of Section I.D.3., Modifications, of the Hanford Facility Permit. In particular, the potential permit modifications in the permit application, but not listed above (see the Part 8 Permit Application, page 1-4, lines 41 and 46, and page 1-5, lines 1, 10, and 23) are too ambiguous to be evaluated at this time.</p> <p>DOE-RL/WHC Response: The text has been modified to reflect these permit modification requirements. The DOE-RL and Westinghouse Hanford maintain that changes to portions of the contingency plan documents that are not governed by the requirements of WAC 173-303 will not be considered as a modification subject to review or approval by Ecology.</p>	
93.	<p><u>Page 2-2, line 19.</u> Typographical error. The paragraph break at this line should be deleted.</p> <p>DOE-RL/WHC Response: The paragraph break will be deleted.</p>	
94.	<p><u>Page 2-2, line 51.</u> The text uses the term 'facility' in a context which implies that it is synonymous with the term 'NRDWSF.' According to the definition provided in WAC 173-303-040(30) the term 'facility' may be construed to mean the Hanford Site. See also the definition for "dangerous waste management unit" under WAC 173-303-040(111).</p>	

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94.	<p>(Con't)</p> <p><u>Ecology Requirement:</u> Correct the ambiguities in the use of the terms describing the Hanford Facility and the individual dangerous waste management units as used throughout this permit application. It is not acceptable to attempt avoiding the requirements of WAC 173-303 by claiming to be alternately a single facility and conversely just a small TSD unit within the larger facility. See comment number 90.</p> <p>DOE-RL/WHC Response: The ambiguities associated with the use of the term 'facility' have been corrected.</p>	
95.	<p><u>Page 2-10, line 52.</u> Typographical error. The semicolon at the end of this line should be deleted.</p> <p>DOE-RL/WHC Response: The following text will be inserted after the semicolon "however, loads as large as 140 pounds per square inch have been transported..."</p>	
96.	<p><u>Page 2-17, line 42.</u> Section 2.7.2.2, Management of Contaminated Soil, Waters, or Other Materials, gives details of how contaminated materials resulting from an unplanned release would be managed. These procedures should be in the contingency plan.</p> <p><u>Ecology Requirement:</u> Ensure that this topic is covered in detail in the contingency plan. If it is already within the contingency plan, reference the appropriate section.</p> <p>DOE-RL/WHC Response: A reference to the contingency plan has been provided.</p>	
97.	<p><u>Page 2-18, line 25.</u> If Solid Waste Engineering staff is not able to designate the released material and associated debris resulting from a release, the Hazardous Materials Response Team and the Chemical Spill Response Team are called. The Hazardous Materials Response Team is also responsible for stabilizing a spill area so that additional contamination does not occur. It is not clear who has this function if the Hazardous Materials Response Team is not called as would apparently be the case if Solid Waste Engineering can designate the spilled material.</p> <p><u>Ecology Requirement:</u> Clarify the procedures to be followed in the event of an unplanned release and resolve any discrepancies or inconsistencies such as those noted previously. Reference the section(s) where this procedure(s) is in the contingency plan.</p> <p>DOE-RL/WHC Response: A reference to the contingency plan has been provided.</p>	
98.	<p><u>Page 3-7, line 12.</u> The sampling and testing methods referenced in Sections 3.2.2 and 3.2.3 and references therein are not equivalent to the methods stipulated in WAC 173-303-110, Sampling and Testing Methods.</p>	

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98.	<p>(Cont'd)</p> <p><u>Ecology Requirement:</u> Revise the permit application and operations so that the correct sampling and testing methods are utilized for waste designation pursuant to WAC 173-303-110.</p> <p>DOE-RL/WHC Response: The text has been modified so that the correct sampling and testing methods are specified for waste designation pursuant to WAC 173-303-110.</p>	
99.	<p><u>Page 4-4.</u> Control of run-on is discussed, but control of run-off is not.</p> <p><u>Ecology Requirement:</u> Discuss the control of run-off from the facility. In particular, the case of activation of the sprinkler system should be addressed.</p> <p>DOE-RL/WHC Response: A discussion of the control of run-off has been included in the text.</p>	
100.	<p><u>Page 6-4, line 18.</u> Annual inspection of the 616 NRDWSF ignitable and reactive storage areas by a professional familiar with the Uniform Fire Code is mentioned. No mention of recordkeeping is made.</p> <p><u>Ecology Requirement:</u> Records of these inspections must be made in the inspection log or the operating record per the requirements of WAC 173-303-395(1)(d). Revise the text accordingly; state where these records will be maintained.</p> <p>DOE-RL/WHC Response: The text has been revised to include documentation of the annual inspection in the 616 NRDWSF logbook.</p>	
101.	<p><u>Page F6-1.</u> The daily inspection data sheet seems to be conducive to cursory inspections of the facility.</p> <p><u>Ecology Requirement:</u> Modify the daily inspection data sheet so that there are individual check-offs for items D through I for each storage cell and waste handling area, not just the entire facility all in one check mark.</p> <p>DOE-RL/WHC Response: The daily and weekly inspection data sheets have been modified to provide check-offs for each area of the building.</p>	
102.	<p><u>Page 7-1, line 12.</u> The permit application states that modifications to the contingency plan may be made but not considered as a modification subject to review or approval by Ecology if the revision is not governed by the requirements of WAC 173-303. After issuance, all modifications to the Part B permit are subject to requirements of Section I.D.3., Modifications, of the Hanford Facility Permit... Delete this paragraph, lines 12 through 17 from the permit application.</p>	

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102.	(Cont'd) DOE-RL/WHC Response: The DOE-RL/WHC maintain that changes to portions of the contingency plan documents that are not governed by the requirements of WAC 173-303 will not be considered as a modification subject to review or approval by Ecology.	
103.	<u>Page 11-2, line 42.</u> Typographical error. "...provide a approximately ..." DOE-RL/WHC Response: The text containing the typographical error has been deleted.	
104.	<u>Page 11-6, line 13.</u> The permit application states that rinsate will be stored as "detailed previously" but does not reference where in the permit application this procedure is previously detailed. <u>Ecology Requirement:</u> Reference the procedure for containerizing, designating, and storing this rinsate. All other references to "previously detailed" procedures must specify the appropriate section. DOE-RL/WHC Response: The text will be changed to state "The pump will be rinsed three times. The rinsate will be containerized, sampled (per Appendix 11A), designated and shipped to a permitted offsite facility for treatment, storage, and/or disposal if necessary." Also all other references to, 'previously detailed' will specify the appropriate section referenced.	
105.	<u>Page 11-9, line 1.</u> Sampling and analysis of the pad subsoils is not currently planned. <u>Ecology Requirement:</u> This is required, amend the closure plan accordingly. DOE-RL/WHC Response: The text has been modified to incorporate the sampling and analysis of soils beneath the loading pads.	
106.	<u>Appendix 7A.</u> The Building Emergency Plan is not sufficiently detailed for evaluation, much less implementation. This may be due to the fact that a number of additional documents, as discussed at the Unit Managers Meeting of August 15, 1990, are necessary for implementation of the emergency plan. <u>Ecology Requirement:</u> Submit all documents to Ecology that are necessary for implementation of the contingency plan. DOE-RL/WHC Response: The general site emergency response plans have been (or should be) provided with the generic Part B for the Hanford Site. The 616 Building Emergency Plan is the specific plan for emergency response actions at the 616 NRWWSF. It is sufficiently detailed for implementation and is presently in the waste management unit for use in response to an emergency.	

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107.	<p><u>Page 7A-3.</u> The plan describes the types of wastes not acceptable at the 616 NRDWSF; radioactive and mixed waste are not on this list.</p> <p><u>Ecology Requirement:</u> Include radioactive waste and mixed waste on this list. <u>DOE-RL/WHC Response:</u> The comment references the third paragraph of the 616 Building Emergency Plan that is in the general description of the waste management unit and associated operations. As stated in the first paragraph of Section 1.4, the waste management unit only accepts <u>nonradioactive</u> wastes. By definition, this excludes radioactive and mixed wastes. These items do not need to be included in the referenced paragraph.</p>	
108.	<p><u>Page 7A-5, Section 2.1.</u> Under the last bullet it states that the "emergency plan consist of this plan, the WHC Emergency Plan, the DOE-RL Emergency Plan, and the DOE-RL Emergency Procedures Manual." This contingency plan must be sufficiently developed to fulfill the requirements of WAC 173-303-350. This indicates that other documents are necessary to implement this plan.</p> <p><u>Ecology Requirement:</u> All documents required for implementation of the contingency plan must be submitted to Ecology to fulfill the requirements of WAC 173-303-806(4)(a)(vii). These may be submitted in the TSD Unit's permit application or within the scope of the Hanford Facility Permit Application. See comment number 107. <u>DOE-RL/WHC Response:</u> The 616 NRDWSF is part of the Hanford Site and as such will be covered by the site emergency response organizations. The 616 Building Emergency Plan identifies the requirements for the waste management unit personnel in responding to an emergency situation.</p> <p>The emergency response organizations (as with any other waste management unit) will have their own response plans. The generic Site Part B should provide the general emergency response plan. The 616 Building Emergency Plan satisfies the requirements of WAC 173-303-806(4)(a)(vii) and WAC 173-303-350.</p>	
109.	<p><u>Page 7A-5.</u> The plan states that each employee must annually review this plan and document that review using the "Employee Building Emergency Plan Checklist," as defined in WHC-CM-4-1. This requirement is not a necessary part of the emergency plan, but instead clutters and, therefore, obscures the information presented.</p> <p><u>Ecology Requirement:</u> This requirement should be included as part of employee training; the documentation must be addressed in the records section.</p>	

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109. (Cont'd)

DOE-RL/WHC Response: While not a requirement of WAC 173-303, the inclusion of the annual employee review and documentation via the Employee Building Emergency Plan Checklist is included in the 616 Building Emergency Plan to ensure that this review is completed. The 616 Building Emergency Plan is the actual operating document for 616 NRDWSF personnel emergency response. This requirement only adds a single paragraph to the building emergency plan and does not clutter or obscure the information presented. The requirements will remain in the 616 Building Emergency Plan, be noted in the Personnel Training Chapter, and documentation requirements noted in the Reporting and Recordkeeping Chapter. (Note that the form number will be corrected to the latest number used for this form.)

110. Page 7A-7. The bullet list does not include radioactive materials; it is also redundant with the information provided on page 7A-3 of this contingency plan.

Ecology Requirement: Revise the text as appropriate. Eliminate disorganization and redundancies within the text to the extent possible.

DOE-RL/WHC Response: The referenced list (Section 3.0) is a list of hazardous wastes that are not accepted at the 616 NRDWSF. The last sentence of the section states "Radioactive waste are not stored in the 616 Building." No text revision is appropriate. Although some information may be repeated in different sections of the plan, it has been based on a format developed for use prepared for all Hanford Site waste management unit specific emergency plans. This information is thus more easily accessed by anyone familiar with the format in responding to an actual emergency at any Hanford Site waste management unit. No revisions are deemed necessary.

Response #9

Revise Section 2.5.1, p. 12-12, lines 31-35, to read:

1. Liquid is visually inspected for signs of contamination.
 2. Inspection reports and the 616 NRDWSF operating and spill logbooks are reviewed to identify any spills on the pad for which remedial actions have not been completed.
-

Response #19

The following organizations will be identified throughout the text as having responsibilities associated with the 616 NRDWSF:

- Solid Waste Engineering has responsibility for providing engineering support to the 616 NRDWSF.
- Solid Waste Operations has responsibility for operating the 616 NRDWSF.
- Transportation Logistics has responsibility for inspecting waste packages before shipment.
- Solid Waste Disposal has responsibility for transporting waste packages onsite.

Add the following organizational charts to Chapter 2.0

Response #19

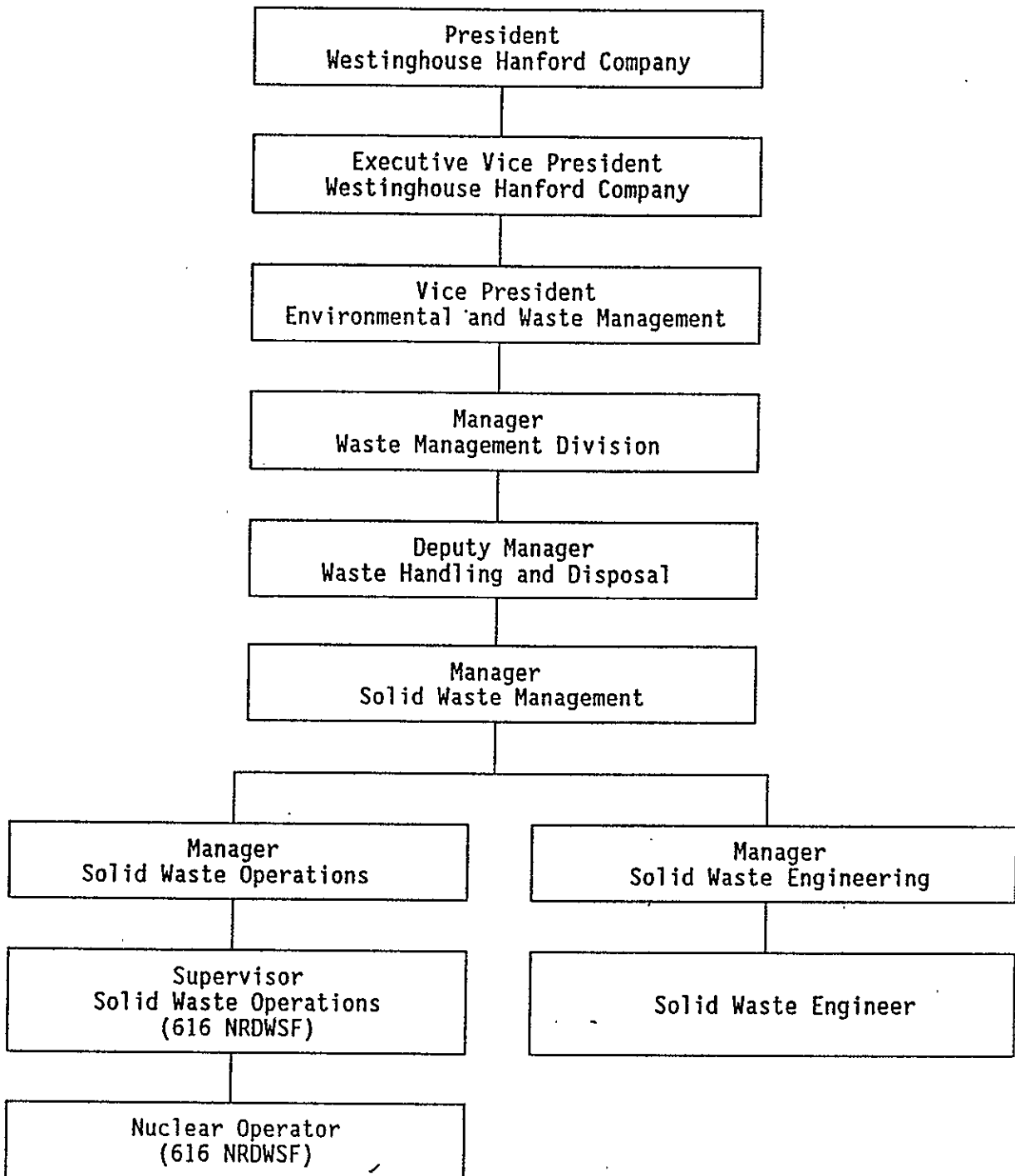


Figure 2-2. The 616 Nonradioactive Dangerous Waste Storage Facility Organizational Chart.

Response #19

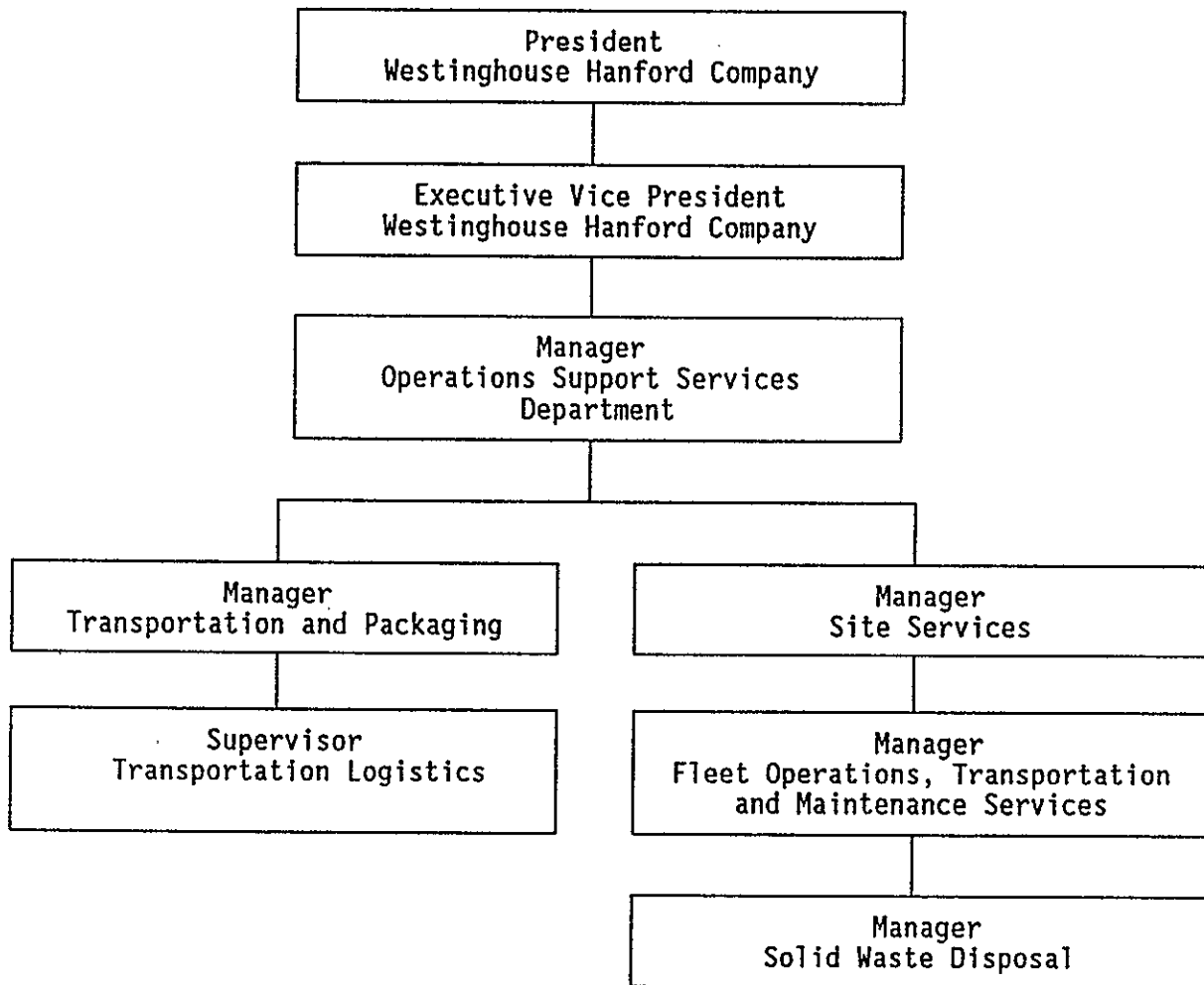


Figure 2-?. Hanford Site Waste Transportation Support Organizations.

Response #31

Revise Section 4.1.1.4, p. 4-3, lines 17-30 to read:

4.1.1.4 Requirement for Base or Liner to Contain Liquids [D-1a(3)(a)]. The floor and trenches in the storage and container handling areas are constructed of reinforced concrete. Concrete was selected as a construction material because it is essentially inert and inhibits downward permeation of caustic, oxidizing, combustible, and flammable liquid materials. The concrete floor surface additionally has been sealed with Aquapon*, a polyamide epoxy resin which, when cured, has properties similar to glass. Aquapon base finish coatings were selected because of their capability to resist abrasion, extreme environmental conditions, and a wide variety of chemical exposures (Appendix 4D). The application of additional and/or alternate sealants was determined to be unnecessary because of the limited potential for adverse chemical exposure to the 616 NRDWSF storage areas.

The design of the floor in the storage and container handling areas consists of concrete slabs (seamless) sloped to dedicated collection trenches (Figure 4-1 and Appendix 4B). All interior trenches are self-contained (without drains). Each storage cell is surrounded by a curb varying in height from 2 to 4 inches that would provide additional containment in the event of a large spill.

[GRAPHIC FOR RESPONSE #31]
Aquapon Performance Data

Exposure (temperature 77°, 25 °C)	Recommended for immersion use	Recommended for nonimmersion use ^a	Not recommended for use ^b
Acetic acid			X
Alcohol	X		
Alum	X		
Amines			X
Ammonium hydroxide (>10%)			X
Ammonium nitrate (20%)	X		
Animal oils		X	
Ligroin	X		
Calcium chloride (20%)	X		
Calcium chloride (>20%)		X	
Calcium hydroxide	X		
Calcium hypochlorite			X
Caustic soda		X	
Chlorinated solvents			X
Chromic acid			X
Diesel oil	X		
Ferric chloride		X	
Ferrous sulfate		X	
Formaldehyde			X
Gasoline	X		
Glycerine		X	
Hydrochloric acid		X	
Hydrogen peroxide			X
Hydraulic fluids			X
JP 4 fuel	X		
Kerosene	X		
Linseed fatty acids	X		
Mineral spirits	X		
Monochloro benzene	X		
Nitric acid		X	
Potassium bromide (10%)	X		
P.V.A. latex			X
Silage acids			X
Sodium chloride		X	
Sodium hypochlorite			X
Sodium sulfate		X	
Sour and sweet crude oil	X		
Sugar syrup		X	
Sulfuric acid		X	
Toluene	X		
Vegetable oils		X	

^aRecommended for surfaces exposed to spills, splashes, dust, and fumes from the listed materials.^bNot recommended for use where the listed materials create a severe exposure.

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Table 1. Identification and Description
of Emergency Equipment. (sheet 1 of 3)

Item	Location	Physical Description	Capabilities
<u>Fixed Emergency Equipment</u>			
Fixed Fire Control System	Throughout the 616 Building.	Wet pipe overhead sprinkler system.	Assist in fire control. Activated by heat. The system for the storage cells is designed to meet Extra Hazard, Group 2, National Fire Protection Association requirements (NFPA 1988).
Fire Hydrant	Exterior of the southeast corner of the 616 Building.	Yellow hydrant enclosed in four posts.	Supply water for fighting fires.
Eye Wash/Shower Stations	2 units: one is located in the Combustible Cell, the other is in the Packaging and Sampling Room.	Fixed combination eyewash/safety shower.	Immediate decontamination of building personnel who have been inadvertently exposed to hazardous materials.
<u>Portable Emergency Equipment</u>			
Portable Eyewash Stations	1 unit generally located near the roll-up door to the receiving area.	3 ft tall commercial type silver canisters.	Provide water wash for eyes inadvertently exposed to hazardous materials.
Portable Fire Extinguishers	1 unit located in the office.	10-ABC Type.	Fighting fires in wood, cloth, paper, flammable liquids, gasses, greases, and energized electrical equipment.
Portable Fire Extinguishers	4 units: hallway outside of the office, Receiving Room, Combustible Cell, Flammable Cell 18.	4-ABC Type.	Fighting fires in wood, cloth, paper, flammable liquids, gasses, greases, and energized electrical equipment.
<u>Protective Equipment</u>			
Waterproof Coveralls	Outside Men's Change Room.	10 pair minimum; typically are white in color, Saranex [®] type.	Provide protection when cleaning up spills or sampling unknown material.
Dust Masks	Packaging material and handling equipment (PMHE) area.	10 masks minimum; white	Provide protection from irritant dusts.

[®]Saranex is a registered trademark of Dow Chemical Company, Midland, Michigan.

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Table 1. Identification and Description
of Emergency Equipment. (sheet 2 of 3)

Item	Location	Physical Description	Capabilities
<u>Protective Equipment</u>			
Acid Suit	PMHE area.	4 pair minimum; typically green in color.	Provide protection when cleaning up spills or sampling unknown material response at other location by CERT members.
Chemical Splash Goggles	PMHE area.	10 goggles minimum; standard type.	Provide personnel protection when sampling or to clean up spills that present a danger to the eyes.
Chemical Resistant Gloves	PMHE area.	24 pair minimum; standard.	Provide protection when cleaning up acids, solvents, or unknown materials.
Leather Gloves	PMHE area.	12 pair minimum; standard.	Provide protection when handling new containers.
<u>Spill Control Equipment</u>			
Drum Dolly	PMHE area.	8 assorted sizes/types of specialized hand trucks.	Moving drums.
Absorbent Material	PMHE area and portable storage unit north of 616 Building.	6 bags minimum; cat litter, diatomaceous earth.	Absorbing spills.
Overpack Drums	PMHE and portable storage unit north of 616 Building.	Minimum of 3 each; 3, 30.55, and 85 gallon "salvage" drums.	Overpack damaged containers.
Chemical Transfer Pumps	1 in PMHE area.	Hand pump	Transfer liquids to secure containers.
	2 in 616 Building packaging and sampling room.	Electric pumps.	
	3 in 616 Building flammable cell 1A	Explosion-proof pumps.	
Nonsparking Tools	PMHE area.	Special wrenches, hammers, shovels, etc.	Handling flammables.
Spill Control Kit	616 Receiving Area and portable storage unit north of 616 Building.	Assorted types stored in boxes.	Handle spills of organic solvents, inorganic solvents, caustics, acids, and mercury.

Response #32

Revise Section 4.1.1.4, p. 4-3, lines 32-46, to read:

If a crack is found that compromises the integrity of the concrete containment system of a storage cell, the crack is prepared, grouted, and sealed in accordance with the *Project B-526 Construction Specifications* (Appendix 4B) and the repair material manufacturer's instructions. Significant* cracks in the floor surface of the storage cells will be repaired within 14 working days of detection. Significant cracks in the storage cell containment trenches will be repaired within 5 working days of detection. If crack repairs cannot be completed within the specified time periods, liquid waste storage in the affected areas will be suspended until repairs are completed.

After repair completion, the Solid Waste Operations supervisor and a Solid Waste Engineering representative will inspect the repair to ensure acceptability. The supervisor and Solid Waste Engineering representative will sign the 616 NRDWSF logbook indicating acceptance of the repair. The 616 NRDWSF logbook will be maintained for the life of the waste management unit.

* 'Significant' as used in this section of the text is a crack in which liquids from a waste spill could be released to the environment.

Response #38

Revise the table in the Building Emergency Plan, Appendix 7A, pages 16, 17, and 18 of 47, as follows:

MHC-IP-0263-616
BUILDING EMERGENCY PLAN
616 BUILDING

Revision
Page
Issue Date

0
18 of 47
October 1, 1990

Table 1. Identification and Description
of Emergency Equipment. (sheet 3 of 3)

Item	Location	Physical Description	Capabilities
<u>Communications Systems</u>			
Radios	2 units, 1 base station in 616 office, 1 portable in PHHE area.	Standard equipment.	Provide communications.
Public Address System	616 Building office, storage cells, and exterior.	Standard-source is from the 616 office.	Provide communications within and outside the building.
Telephones	616 Building office (2), Receiving Room (1), on the telephone pole on the east side exterior of the building (1).	Standard.	Provide communications.
Crash Phones	616 Building office (1).	Standard telephone with white label on handle.	Emergency communications.
<u>Alarms</u>			
Fire Alarm Pull Boxes (10 units)	Flammable Cell 1A (1), Flammable Cell 1B (2), Acid Cell (1), Combustible Cell (1), Caustic Cell (1), Oxidizer Cell (1), Packaging and Sampling Room (1), Receiving Room (1), and inside Main Entrance (1).	Standard Pull Boxes	Alerts 616 Building, fire station of fire.
Fire Alarm Button	Outside main entrance	Push Button	Alerts 616 Building and Fire Station of fire.
Loss of Ventilation Indicator Lights	616 Building office (2)	2 small red lights.	Indicates when office, cell ventilation systems are operating.
Evacuation/Take Cover Alarm	616 Building office	Gray panel.	Operated manually to initiate building evacuation.

1
2
3 **Response #46**

4
5 Revise the table in the Building Emergency Plan, Appendix 7A, page 41 of 47,
6 as follows:

Response #46

WHC-IP-0263-616	Revision	0
BUILDING EMERGENCY PLAN	Page	41 of 47
616 BUILDING	Issue Date	April 12, 1990

APPENDIX A
BUILDING EMERGENCY RESPONSE ORGANIZATION LISTING*Building Emergency Director

	<u>Name</u>	<u>Location</u>	<u>Phone</u>
Primary:	Solid Waste Operations Supervisor	(616 NRWSF)	
Alternate:	Solid Waste Operations Supervisor		
Alternate:	Solid Waste Operations Supervisor		

Staging Area Managers

	<u>Name</u>	<u>Location</u>	<u>Phone</u>
Primary:			
Alternate:			
Alternate:			

Volunteer Bomb Search Team Members

	<u>Name</u>	<u>Location</u>	<u>Phone</u>
Primary:			
Primary:			
Alternate:			

Evacuation Bus Drivers

	<u>Name</u>	<u>Location</u>	<u>Phone</u>
Primary:			
Alternate:			

* Note: Identification of personnel appointed to the listed emergency response positions will be addressed as part of the Hanford Site-wide Part B permit application.

Response #56

Revise Section 11.1.1.1, p. 11-1, and Section 11.1.1.2, p. 11-2, to read:

11.1.1.1 Performance Standards [I-1a(2)]

First paragraph after bullets, change as follows:

In general, these standards will be achieved by removing, to below background levels or regulatory thresholds, dangerous waste from the 616 NRDWSF and decontaminating or removing all equipment, structures, soils, or other materials containing or contaminated with dangerous waste or waste residue from the waste management unit remediation of the waste management unit to levels that are protective of human health and the environment, and by decontamination or removal of equipment, structures, soil residues or other materials as necessary to protect the environment and public health.

11.1.1.2 Removal or Decontamination Standard [I-1a(1)]. Clean closure of the 616 NRDWSF will require removal and disposal of dangerous waste, contaminated equipment, and rinsate that pose a threat to human health or the environment. Verification sampling will be performed subsequent to an initial decontamination of the 616 NRDWSF building and equipment to verify contamination removal to concentrations below levels deleterious to human health and the environment. An initial decontamination of the 616 NRDWSF building and equipment will be performed in accordance with Section 11.1.4. Following the decontamination procedure, the building and equipment will be shown to be free of contamination by verification sampling. To achieve clean closure, all samples must be shown to meet or exceed the standards specified in the following paragraphs.

The painted areas of the concrete walls inside the waste handling areas of the building will be wipe sampled. Detection limits will be used as the background levels for wipe samples taken of the walls. The wipe samples will be analyzed by the TCLP method.

The poured concrete floor of the 616 NRDWSF will be dispositioned with the trenches and sumps. The trenches and sumps are assumed to be the areas of the floor potentially subjected to the highest level of contamination. Consequently, the disposition of the floors will be contingent on results of wipe and core sampling of the trenches and sumps. Detection limits and clean concrete will be used as background for wipe samples. The wipe samples will be analyzed by the TCLP method. Background for the floors, trenches, sumps, and loading areas will be established by coring the entrance walkway located between the office and the storage areas. The walkway will be cored randomly in seven locations in accordance with the coring procedures at the time of closure. The walkway has been selected as the location for background samples

1 because the concrete was poured at the same time for the entire building and
2 loading areas. Because the walkway is outside of the waste handling/storage
3 areas, any contamination of the walkway will be surface contamination only.
4

5 All contaminated equipment will undergo initial decontamination
6 procedures. The decontaminated equipment will be reused. Any equipment that
7 cannot be decontaminated will be disposed of per the designating wipe sample.
8 Detection limits will be used as background for wipe samples. The wipe
9 samples will be analyzed by the TCLP method.
10

11 The soil immediately surrounding the loading areas will be sampled for
12 verification that the environment has not been affected by the 616 NRDWSF
13 operations. Background thresholds will be the acceptance/rejection criteria.
14 Should contaminants be detected above background, the soil will be excavated
15 until the level of chemical constituents around the 616 NRDWSF is below or
16 equal to that of background soil samples. Soil background levels will be
17 established by soil sampling per SW-846 (EPA 1986).
18

19 Background threshold concentrations and significance levels will be
20 based on information including mean concentrations and variance for each
21 constituent of concern. Generally the present methods used to establish
22 background thresholds are consistent with methods identified in WAC 173-340.
23 Specific approaches and the criteria and assumptions implicit in establishing
24 concentration levels that constitute significant deviation from background or
25 other control levels will be consistent with the outcome of background
26 discussions currently underway with Ecology and the EPA. Background sampling
27 will be done at the time of closure.
28
29
30

31 Response #57

32
33 Revise Section 11.1.4.3.2, p. 11-8, to read:
34

35 11.1.4.3.2 Sampling and Verification of the Walls. The outer walls of
36 the 616 NRDWSF consist of precast concrete double-tee panels. The inner walls
37 are constructed of concrete masonry units. These walls were not used for the
38 storage of waste. The walls will be decontaminated in the initial
39 decontamination wash.
40

41 In addition to the initial washing of the painted areas mentioned
42 previously, bias wipe samples will be taken and analyzed. Care will be taken
43 to wipe the surface only once throughout the sampling effort. After the
44 sample is collected, the gauze pad will be placed in a sample container to
45 prevent any volatile contaminants from escaping.
46

47 A laboratory will prepare gauze pads with a solvent compatible with the
48 waste stored in the cell being sampled. For example, hexane may be used on

1 the gauze pads for cells in which organic chemicals were stored, while a
2 dilute solution of nitric acid may be used on gauze pads to obtain an analyses
3 for organic constituents. Gauze pads will be placed in a sample bottle
4 appropriate for analyses of volatile organic constituents. Gauze pads
5 analyzed for inorganic constituents also will be placed in an appropriate
6 sample bottle. Rigid documentation performed throughout the operation of the
7 616 NRDWSF will permit sampling and analyses for constituents known to have
8 been stored in each cell. Analytical methods will be conducted according to
9 standard sampling techniques (EPA 1987). Appendix 11A contains a further
10 description of sampling procedures.
11

12 If the analyses of the wipe samples indicate that significant
13 contamination is present, the walls will be decontaminated until the sampling
14 demonstrates the walls to be clean.
15
16
17

18 Response #83

19
20 Revise Section 2.1.2.2, p. 2-3, to read as follows and add compatibility chart
21 to Chapter 2.0.
22

23 2.1.2.2 Storage Cells. Six storage cells (Figure 2-3) are provided for the
24 interim storage of dangerous waste at the 616 NRDWSF. Waste is stored in
25 cells that, in the event of release or event, are designed and constructed to
26 minimize damage to personnel, the environment, and the waste management unit.
27 Waste placement and segregation within the storage cells are performed
28 according to a waste storage compatibility chart (Figure 2-?). As part of the
29 designation process (Chapter 3.0, Section 3.2), Solid Waste Engineering
30 reviews the compatibility chart and assigns a primary storage location. Solid
31 Waste Engineering also documents any unusual chemical characteristics and/or
32 incompatibilities on the Chemical Waste Disposal Analysis letter (Chapter 3.0,
33 Section 3.2). If storage space in the 'primary' storage location is limited,
34 the Solid Waste Operations supervisor may choose a secondary storage location
35 from the compatibility chart.
36

37 Deviations from the compatibility chart may be performed only after
38 Solid Waste Engineering has completed a review of the inventory to determine
39 waste compatibility. The Solid Waste Engineering compatibility assessment
40 must be documented, signed to indicate Solid Waste Engineering peer review,
41 and signed to indicate concurrence from the Solid Waste Operations supervisor.
42 The assessment must be documented either in the 616 NRDWSF operating logbook
43 or filed at the 616 NRDWSF and referenced in the operating logbook. Waste
44 will not be transported to the 616 NRDWSF if the waste cannot be managed and
45 stored safely.
46
47

1

[Compatibility Chart]

Waste Storage Compatibility by Hazard Class

Storage area	Primary storage	Secondary storage	Prohibited storage
Flammable 1A	Flammable gas Flammable liquid-1A Flammable solid	Nonflammable gas Flammable gas Combustible liquid Irritating material ORM-A,B,C,D,E Non-RCRA waste liquids Non-RCRA waste solids Flammable liquid-1B	Poison A Corrosive material (acid) Corrosive Material (caustic) Flammable solid-DWW ^a
Flammable 1B	Nonflammable gas Flammable liquid-1B Flammable solid	Combustible liquid Irritating material ORM-A,B,C,D,E Non-RCRA waste liquids Non-RCRA waste solids	Poison A 1A flammable liquid Corrosive material (acid) Corrosive material (caustic) Flammable solid-DWW
Flammable 1A cabinet	Flammable solid-DWW	Flammable liquid-1A/1B Flammable solid	Poison A Corrosive material (acid) Corrosive material (caustic) Non-RCRA waste liquids
Flammable 1B cabinet	Flammable solid-DWW	Flammable liquid-1B Flammable solid	Poison A Corrosive material (acid) Corrosive material (caustic) Non-RCRA waste liquids
Acid	Poison B Corrosive material (acid) Irritating material ORM-A,B,C,D,E Non-RCRA waste solids	Nonflammable gas Combustible liquid Non-RCRA waste liquids	Poison A Flammable solid-DWW Flammable gas Flammable liquid Flammable solid Oxidizer Organic peroxide Corrosive material (caustic)
Caustic	Corrosive material (caustic) Irritating material ORM-A,B,C,D,E Non-RCRA waste solids	Nonflammable gas Combustible liquid Poison B Non-RCRA waste liquids	Poison A Flammable Solid-DWW Flammable gas Flammable liquid Flammable solid Oxidizer Organic peroxide Corrosive material (acid)
Combustible	Poison A Combustible liquid Poison B Irritating material ORM-A,B,C,D,E Non-RCRA waste liquids Non-RCRA waste solids	Nonflammable gas Flammable solid	Flammable solid-DWW Flammable gas Flammable liquid Corrosive material (acid) Corrosive material (caustic)
Oxidizer	Oxidizer Organic peroxide Irritating material ORM-A,B,C,D,E Non-RCRA waste liquids Non-RCRA waste solids	Nonflammable gas Combustible liquid Poison-B	Poison A Flammable solid-DWW Flammable gas Flammable liquid Corrosive material (acid) Corrosive material (caustic)
Packaging and sampling room		Combustible liquid Irritating material ORM-A,B,C,D,E Non-RCRA waste liquids Non-RCRA waste solids	Flammable gas Flammable liquid Flammable solid-DWW corrosive material (acid) corrosive material (caustic)

^a DWW = Dangerous when wet

Response #87

Add the following paragraph to Section 4.1.1.1, p. 4-1:

All waste containers received at the 616 NRDWSF are marked and labeled in accordance with the requirements specified under U.S. Department of Transportation regulations, 49 CFR Part 172. Solid Waste Engineering specifies marking and labeling requirements on the Chemical Waste Disposal Analysis letter (Chapter 3.0, Section 3.2). In addition to the U.S. Department of Transportation marking and labeling requirements, hazard classes 'ORM-A', 'ORM-B', 'ORM-C', 'ORM-D', and 'ORM-E' also must be marked as follows:

- 'PERSISTENT' - If a WP01, WP02, or WP03 waste code is applicable
- 'TOXIC' - If a WT01 or WT02 waste code is applicable
- 'CARCINOGENIC' - If a WC01 or WC02 waste code is applicable.

The three markings also must be applied to waste that is regulated under the requirements of WAC 173-303 but not 40 CFR Part 261 (waste regulated by Ecology regulations only).

Response #90

Add the following section to Chapter 1.0, p. 1-4:

1.4 DEFINITIONS

Throughout the text of the permit application, several terms are used repeatedly. Definitions of some of these terms are as follows:

Facility--The term 'facility', as used in this permit application, has several meanings based on context. The terms 'facility' and 'TSD (treatment, storage, and/or disposal) facility' are used interchangeably. In general, the term 'facility' refers to the Hanford Site (definition below) because the entire Site has just one EPA Identification Number. However, because of the use of the term 'facility' in various sections of the Washington Administrative Code referenced herein, and broad general usage, the term 'facility' also may refer to:

- An offsite TSD facility designated to receive shipments of dangerous waste, i.e., the destination of a shipment traveling under a dangerous waste manifest as described in WAC 173-303-180
- The 616 NRDWSF, in connection with citations from the WAC or other regulations, when noting requirements applicable to TSD facilities in general.

The term 'facility' remains as part of the title for the 616 Nonradioactive Dangerous Waste Storage Facility. However, the term 'facility' by itself, as defined, is not used when referring to the 616 Nonradioactive Dangerous Waste Storage Facility.

Generating Unit--The term 'generating unit' as used in this permit application refers to the individual generating processes (laboratories, maintenance shops, etc.) that generate waste requiring management under the regulation of WAC 173-303. The waste is generated by the DOE-RL or one of their contractors performing work authorized under their contract with the DOE-RL.

Generator--The term 'generator' refers to the DOE-RL and their contractors performing work authorized under their contract with the DOE-RL.

Hanford Site--The term 'Hanford Site' refers to the approximately 560 contiguous square miles under the operational control of the DOE-RL. The DOE-RL has been issued a single EPA Identification Number for all regulated dangerous waste management activities (generation, transportation, recycling, treatment, storage, and disposal) occurring on the Hanford Site.

Offsite--The term 'offsite' (facility) refers to waste generators, transporters, recyclers, and TSD facilities not defined as 'onsite'.

Onsite--The term 'onsite' (facility) refers to waste generators, transporters, recyclers, and TSD facilities that are:

- Located on the Hanford Site or on other Tri-Cities (Richland, Kennewick, and Pasco) properties owned or leased by the DOE-RL or its contractors
- Co-operated by one of the DOE-RL's contractors.

Waste Management Unit--The term 'waste management unit' (or 'unit') is used throughout the permit application to refer to the physical location, building, and equipment comprising the 616 NRDWSF. In selected instances, the term means other onsite TSD units. It may be inferred to have the same meaning as the term 'dangerous waste management unit' as defined in WAC 173-303-340.

Response #92

Revise Section 1.4, p. 1-4, to read:

~~1.4.1~~ ~~1.5.1~~ Minor Modifications

The following modifications to the permit will be considered as minor modifications:

- Correction of typographical errors
- Changes to the list of 616 NRDWSF emergency coordinators or equipment identified in the contingency plan
- Inclusion of new and/or updated maps
- Revision of the Radiation Exempt Facility List
- ~~Change of contractor that co-operates the 616 NRDWSF with the DOE-RL~~

~~1.4.2~~ ~~1.5.2~~ Modifications Subject to Approval by Ecology

The following are examples of modifications that may be made to the permit, subject to approval by Ecology:

- Addition and/or deletion of dangerous waste codes for waste to be stored as a result of changing regulations
- Changes in the annual quantities of regulated waste to be handled
- Significant changes to the 616 NRDWSF site and/or building and associated changes to drawings
- Revision of forms included in the Permit.

Documentation for the proposed modification should be submitted to Ecology. If Ecology does not respond within 30 days from receipt of the proposal, the proposed modification will take effect as a minor modification.

~~1.4.3~~ ~~1.5.3~~ Other Modifications

The WAC 173-303 requirements for contingency plans are satisfied in the following documents: the DOE-RL emergency plan and procedures manuals, the *Westinghouse Hanford Company Emergency Plan* (WHC 1989), and the *Westinghouse Hanford Company Building Emergency Plan - 616 Building* (WHC 1990).

1 The cited contingency plan documents also serve to satisfy a broad range
2 of other requirements (e.g., Occupational Safety and Health Administration and
3 U.S. Department of Energy Orders). Therefore, no revisions made to portions
4 of the contingency plan documents that are not governed by the requirements of
5 WAC 173-303 will not be considered as a modification subject to review or
6 approval by Ecology.

7
8 All other modifications to the permit are subject to the requirements of
9 Section I.D.3., Modifications, of the Hanford Facility Permit.
10
11

12 Response #95

13
14 Revise Section 2.4.1, p. 2-10, line 52, p. 2-11, line 1 to read:

15
16 Currently, no load-bearing capacities of these roads are available;
17 however, loads as large as 140 pounds per square inch have been transported
18 without observable damage to road surfaces.
19
20
21

22 Response #96 and #97

23
24 Revise Section 2.7.1, p. 2-15, Section 2.7.2.1, p. 2-16, and Section 2.7.2.2,
25 p. 2-17, to read:

26 2.7.1 Notification [B-7a]

27
28 The procedures that are followed to make necessary notifications in the
29 event of a nonpermitted spill or discharge of nonradioactive dangerous waste
30 from the 616 NRDWSF to the environment are detailed in the Building Emergency
31 Plan - 616 Building provided in Appendix 7A.
32
33

34 2.7.2.1 Office and Change Rooms. The procedures that are followed to
35 clean up released waste or substances resulting from a nonpermitted spill or
36 discharge of nonradioactive dangerous waste from the 616 NRDWSF to the
37 environment are detailed in the Building Emergency Plan - 616 Building
38 provided in Appendix 7A.
39

40 2.7.2.2 Storage Cells. The procedures that are followed to manage
41 contaminated soil, water, or other material resulting from a nonpermitted
42 spill or discharge of nonradioactive dangerous waste from the 616 NRDWSF to
43 the environment are detailed in the Building Emergency Plan - 616 Building
44 provided in Appendix 7A.
45
46
47

Response #98

Revise Sections 3.2.2 and 3.2.3, p. 3-7, and Figure 3-4, to read:

3.2.2 Test Methods [C-2b]

To completely characterize the waste before transport to the 616 NRDWSF, analytical testing often is required by the generator, Solid Waste Engineering, or the offsite waste disposal contractor (Section 3.2.4). Table 3-4 lists analytical methodologies by which the waste is to be analyzed.

In all instances, test methods must conform to those referenced in the *Chemical Testing Methods for Complying With the State of Washington Dangerous Waste Regulations* (Ecology March 1982, revised July 1983), the American Society for Testing Materials (ASTM 1982), or the *Test Methods for the Evaluation of Solid Waste, Physical/Chemical Methods (SW-846)* (EPA 1986). All test methods must conform to those referenced in WAC 173-303-110.

3.2.3 Sampling Methods [C-2c]

Representative sampling may be requested by Solid Waste Engineering to ensure proper waste identification and would be performed under the direction of a waste coordinator at the point of generation.

The specific sampling methods and equipment vary with the chemical and physical nature of the waste material and the sampling circumstances. All sampling methods must conform to those referenced in WAC 173-303-110.

Sampling methods and equipment used for sampling different materials are presented in Table 3-5. For liquid waste in tanks or containers, a composite liquid waste sample (COLIWASA) device or tubing is used to obtain a vertical core section. The length of the liquid sample device is adequate to reach the bottom of the vessel, thus providing a representative sample of all phases of the waste. Sample analysis is performed on each phase of the waste. For solid waste, either tubing or a scoop may be used, depending on the nature of the waste. For bulk solids, such as contaminated soil, representative samples will be obtained with a trier or an auger. For contaminated containment structures, such as concrete or steel, samples will be obtained using the Occupational Safety and Health Administration wipe test procedure (OSHA 1977). Composite sampling will be performed by obtaining samples in random locations. Should a maximum chemical contamination level be required, the location of the highest likely chemical contamination will be chosen for sampling purposes.

1 All sampling equipment and sample containers are handled so that cross-
2 contamination is minimized. For example, most sampling equipment consists of
3 disposable units to prevent cross-contamination. Plastic materials (other
4 than Teflon*) will not be used for organic waste sampling. Appropriate
5 preservation techniques and chain-of-custody requirements specified in SW-846
6 are used.

1 Response #98

Table 3-4. Analytical Methodologies. (sheet 1 of 2)

Parameter	Methods*
Ignitability	<i>Chemical Testing Methods for Complying with the Dangerous Waste Regulation</i> , March 1982, revised July 1983
Corrosivity	<i>Chemical Testing Methods for Complying with the Dangerous Waste Regulation</i> , March 1982, revised July 1983, including the addendum <i>Test Method for Determining pH of Solutions in contact with Solids</i> , March 1984
Reactivity	<i>Chemical Testing Methods for Complying with the Dangerous Waste Regulation</i> , March 1982, revised July 1983
Toxicity characteristics leaching procedure	EPA Final Rule, <i>Federal Register</i> , Volume 55, pages 11799 through 11877, March 1990
Halogenated hydrocarbons	<i>Chemical Testing Methods for Complying with the Dangerous Waste Regulation</i> , March 1982, revised July 1983
Polycyclic aromatic hydrocarbons	<i>Chemical Testing Methods for Complying with the Dangerous Waste Regulation</i> , March 1982, revised July 1983
Static acute fish toxicity test	<i>Biological Testing Methods</i> , July 1981
Acute oral rat toxicity test	<i>Biological Testing Methods</i> , July 1981
Free liquids (absence or presence)	<i>Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW-846</i> (most recent edition and all updates), Including "Method 9095" (Paint Filter Liquids Test)
Chlorinated dibenzo-p-dioxins and dibenzofurans	40 CFR 261 Appendix X
Polychlorinated biphenyls in transformer fluids and waste oils	EPA-600/4-81-045

1 Response #98

Table 3-4. Analytical Methodologies. (sheet 2 of 2)

Parameter	Methods*
Polychlorinated biphenyls in mineral insulating oils by gas chromatography	ASTM Standard D 4059-86

*WAC 173-303-110 - unless otherwise noted
EPA = U.S. Environmental Protection Agency
ASTM = American Society for Testing and Materials.

Response #99

Revise Sections 4.1.1.7 and 4.1.1.8, p. 4-4, to read:

4.1.1.7 Control of Run-On/Run-Off [D-1A(3)(d)]. The only major run-on/run-off foreseen would be a flood, fire sprinkler activation, or a break in the water main. No floods are predicted to impact the 616 NRDWSF (Chapter 2.0, Section 2.3.2).

In the event of a run-on/run-off from any source (e.g., fire sprinkler activation, pipe break, etc.), containment systems in the 616 NRDWSF are capable of holding between 645 and 926 gallons of liquid for each cell as cell width varies. Collected or contained liquid can be removed by hand pumps for large quantities and by absorbents for smaller quantities. All waste stored in the 616 NRDWSF is in sealed containers, which limits the detrimental impact of a run-on/run-off situation.

In the event that contaminated water is released from the 616 NRDWSF because of flooding of the containment system by fire sprinkler activation or pipe break (Section 4.1.1.8), the incident will be treated as a spill.

Actions to be taken in response to a spill or discharge are detailed in the Building Emergency Plan - 616 Building provided in Appendix 7A.

4.1.1.8 Removal of Liquids from Containment System [D-1a(3)(e)]. In the event of a spill or release within the 616 NRDWSF that results in collection of liquid waste material in the containment system, the following are performed.

1. Containers in the cell(s) affected by the spill are inspected for signs of leakage. Leaking containers are repackaged and identified in the 616 NRDWSF operating and spill logbooks.
2. Inspection reports and the 616 NRDWSF operating and spill logbooks are reviewed to identify any waste releases in the waste storage areas for which remedial actions have not been completed.
3. The waste is removed from the containment system. The equipment used for removal of large quantities of liquid normally would be a hand-held pump or vacuum system. Absorbents would be used for removal of small amounts of liquid. The waste material is then placed in the appropriate U.S. Department of Transportation-specified container.

4. The containerized waste is handled as follows:

- If the waste has been altered during stabilization and cleanup actions (absorbed, mixed, diluted, etc.), the containerized waste is placed in storage and managed in accordance with the provisions of the waste analysis plan described in Chapter 3.0, Section 3.2.

A Chemical Waste Disposal Request (Chapter 3.0, Figure 3-2) is submitted to the Solid Waste Engineering staff for waste designation. In response, the Solid Waste Engineering staff issues a Chemical Waste Disposal Analysis letter describing the regulatory status and proper packaging, labeling, and marking requirements for the waste (Chapter 3.0, Section 3.2).

The 616 NRDSF inventory is altered to reflect the changes in waste description, volume, and storage locations.

- If the waste was not altered during stabilization and cleanup activities, the containerized waste is placed in the appropriate storage area and the 616 NRDSF inventory is altered to reflect any changes.

5. Wipe samples are taken of the pad and analyzed to verify cleanup adequacy.

6. When wipe sampling techniques have verified cleanup, the 616 NRDSF supervisor signs the spill logbook indicating that the waste was removed from the containment system and cleanup activities are completed. A Solid Waste Engineering representative signs the spill logbook indicating approval of actions taken.

Specific actions to be taken in response to a spill or discharge are detailed in the Building Emergency Plan - 616 Building provided in Appendix 7A.

In the event of a fire sprinkler activation or pipe break within the 616 NRDSF, which results in collection of water in the containment system, the following is performed.

1. Water in the containment system visually is inspected for signs of contamination.
2. Containers in the cell(s) affected by sprinkler activation or pipe break are inspected for signs of leakage.
3. Inspection reports and the 616 NRDSF operating and spill logbooks are reviewed to identify any waste releases in the waste storage areas for which remedial actions have not been completed.

1 4. The 616 NRDWSF supervisor signs the operating logbook indicating
2 that the above steps have been completed and that the building is
3 clean.
4

5 5. The water is removed from the containment system. The equipment
6 used for removal of large quantities of liquid normally would be a
7 hand-held pump or vacuum system. Absorbents would be used for
8 removal of small amounts of liquid.
9

10 Water that has accumulated in the containment system that cannot be
11 verified to be free of contamination is handled in accordance with
12 Steps 4 through 6 for removal of liquid waste material from the
13 containment system.
14

15 Water that has accumulated in the containment system that can be
16 verified to be free of contamination is released to the french drain
17 system. A Solid Waste Engineering representative signs the
18 616 NRDWSF operating logbook approving the discharge to the french
19 drain.
20

21 6. The 616 NRDWSF supervisor signs the operating logbook indicating
22 that the water was removed from the containment system.
23
24

25 **Response #100**

26
27 Revise Section 6.2.1.2, p. 6-4, lines 18-20, to read:
28

29 As required by WAC 173-303-395(1)(d), an annual inspection of the
30 616 NRDWSF areas where ignitable or reactive waste is stored is performed by a
31 professional knowledgeable of the Uniform Fire Code. The following
32 information is entered into the 616 NRDWSF logbook as a result of this
33 inspection:
34

- 35 • The date and time of the inspection
- 36
- 37 • The name of the person who performed the inspection
- 38
- 39 • A notation of the observations made
- 40
- 41 • Any remedial actions that were taken as a result of this inspection.
- 42

Response #101

Revise Figures 6-1 and 6-2 of Chapter 6.0 as follows:

Response #101

Building 616 Daily Solid Waste Operations Inspection (sheet 1 of 3)

Inspection No. _____ Status: _____ Date: _____ Time: _____

	Yes	No	If no, specify
1.0 Structure Exterior			
Curbing in good condition			
Exits unobstructed			
Pads/loading area crack free			
Trenches locked closed/empty			
No combustibles within 50 feet of structure			
Roads/fire lanes unobstructed			
2.0 Office Area			
Exit Unobstructed			
Fire extinguisher in place			
Public address system operating			
Ventilation indicator lights operating			
Telephone operating			
Radio operating			
Evacuation alarm tested once monthly date:			
3.0 Receiving Material and Handling Equipment Area			
Absorbents present			
Emergency equipment present			
Exit light operating			
Exit unobstructed			
Fire extinguisher in place			
Overpack drums present			
Telephone operating			
Radio operating			
4.0 Hallway			
Exit sign operating			
Fire extinguisher in place			
Exits Unobstructed			
Protective equipment supply present			
Pressure differential gage working-reading:			

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**Building 616 Daily Solid Waste Operations
Inspection (sheet 2 of 3)**

Response #101

	Caustic ^a	Oxidizer ^a	Acid ^a	Combustible ^a	Flammable 1A ^a	Flammable 1B ^a	Packaging and Sampling Room ^a
5.0 Storage Areas							
A. Container Condition:							
Closed							
Corrosion							
Evidence of leakage							
Required labels							
Structural defects							
B. Container Location^b							
Manifest ID#/Location							
Manifest ID#/Location							
Manifest ID#/Location							
Manifest ID#/Location							
Manifest ID#/Location							
C. Safety/Emergency Equipment							
Exit light operating							
Fire extinguisher in place							
D. Structures:							
Curbing							
Exits unobstructed							
Floor							
Roof/walls							
Signs							

^aN/A - Not applicable

X - No problems noted

C - See comments for problem description or remedial action required

^bFive container locations are verified against the facility inventory. Record the manifest ID#/location for each container checked above.
Record discrepancies identified in the comments section.

Response #101

Building 616 Daily Solid Waste Operations Inspection
(sheet 3 of 3)

6. Comments

Inspector

(print name)

(sign name)

7. Remedial Action Taken

8. Solid Waste Operations Supervisor Acknowledgment of Action Completed:

Completion Date: _____

Today's Date: _____

(print name)

(sign name)

Response #101

Building 616 Weekly Solid Waste Operations Inspection (sheet 1 of 3)

Inspection No. _____ Status: _____ Date: _____ Time: _____

	Yes	No	If no, specify
1.0 Structure Exterior			
Curbing in good condition			
Exits unobstructed			
Pads/loading area crack free			
Trenches locked closed/empty			
No combustibles within 50 feet of structure			
Roads/fire lanes unobstructed			
2.0 Office Area			
Emergency light operable			
Exit Unobstructed			
Fire extinguisher charged			
Public address system operating			
Ventilation indicator lights operating			
Telephone operating			
Radio operating			
Evacuation alarm tested once monthly date:			
3.0 Receiving Material and Handling Equipment Area			
Absorbents present			
Emergency equipment present			
Emergency light operable			
Exit light operating			
Exit unobstructed			
Fire extinguisher charged			
Overpack drums present			
Public address system (audible)			
Telephone operating			
Radio operating			
4.0 Hallway			
Exit sign operating			
Fire extinguisher charged			
Exits Unobstructed			
Protective equipment supply present			
Pressure differential gage working-reading:			

**Building 616 Weekly Solid Waste Operations
Inspection (sheet 2 of 3)**

	Caustic ^a	Oxidizer ^a	Acid ^a	Combustible ^a	Flammable 1A ^a	Flammable 1B ^a	Packaging and Sampling Room ^a
5.0 Storage Areas							
A. Container Condition:							
Closed							
Corrosion							
Evidence of leakage							
Required labels							
Structural defects							
B. Container Location^b							
Manifest ID#/Location							
Manifest ID#/Location							
Manifest ID#/Location							
Manifest ID#/Location							
Manifest ID#/Location							
C. Safety/Emergency Equipment							
Emergency light operable							
Exit light operating							
Fire extinguisher charged							
Public address system (audible)							
Safety shower/eye wash tested/flushed (weekly)-date							
D. Structures:							
Curbing							
Exits unobstructed							
Floor							
Roof/walls							
Signs							

^aN/A - Not applicable

X - No problems noted

C - See comments for problem description or remedial action required

^bFive container locations are verified against the facility inventory. Record the manifest ID#/location for each container checked above.
Record discrepancies identified in the comments section.

Response #101

Building 616 Weekly Solid Waste Operations Inspection
(sheet 3 of 3)

6. Comments

Inspector

(print name)

(sign name)

7. Remedial Action Taken

8. Solid Waste Operations Supervisor Acknowledgment of Action Completed:

Completion Date: _____

Today's Date: _____

(print name)

(sign name)

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Response #104

Revise Section 11.1.4.3, p. 11-6, lines 13-14, to read:

...The pump will be rinsed three times and the rinsate stored in container(s), as detailed previously...times. The rinsate will be containerized, sampled (per Appendix 11A), designated, and shipped to a permitted offsite facility for treatment, storage, and/or disposal if necessary.

Response #105

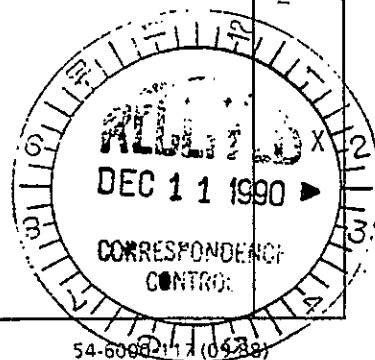
Revise Section 11.1.4.3.3, p. 11-9, lines 1-11, to read:

11.1.4.3.3 Sampling and Verification of the Loading Areas.
(Paragraph 3) change the first sentence to read "Concrete cores will be taken using a coring device of sufficient size to allow sampling of soil underneath, should such action become necessary, beneath the loading pads." Change the sixth sentence to read "The core concrete cores and underlying soil samples will be analyzed for the..."

DISTRIBUTION COVERSHEET

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